

but not satisfactorily referable to any of them." In the succeeding twelve seasons since the publication of *C. mirabilis*, var. *tincta* much material of the plant has accumulated and the writer now has before him specimens representing 39 different collections of the plant. These form a thoroughly consistent series; differing from *C. mirabilis* not only in the fewer dark-colored spikes with almost appressed perigynia barely exceeding the scales but in the low stature, slender culms, narrow leaves and closer sheaths — as different from *C. mirabilis* as is *C. straminea* from *C. mirabilis*, var. *perlonga*.

In well developed *C. mirabilis* the greenish spikes are rather numerous and form a head 2–4.5 cm. long, and the perigynia are much longer than the pale scales and with strongly spreading tips, much as in *C. projecta* Mackenzie (*C. tribuloides*, var. *reducta* Bailey). In *C. tincta* the brown spikes are few, 3–7, in a head 1.5–3 cm. long, and the perigynia are ascending and barely exceed the deep brown or castaneous scales. In *C. mirabilis* the culms are rather stout and ordinarily very tall, up to 1.5 m. high; the leaves 2.5–6 mm. broad, with comparatively loose sheaths. In *C. tincta* the culms are slender and comparatively low, 2.5–9 dm. high, and the leaves are 1–4 mm. wide, with rather close sheaths. Geographically, too, *C. tincta* is of quite different range from *C. mirabilis*. While the latter is generally distributed from central Maine to Manitoba and south to North Carolina, Missouri, and Kansas, *C. tincta* is more boreal, occurring from Newfoundland to northern and western New England.

In its dark scales nearly equaling the perigynia and in its approximate spikes *C. tincta* is nearly related to *C. Macloviana* D'Urv. of northern Europe, Greenland and Labrador and, as stated in the original publication, to the various plants of the Northwest which constitute the polymorphous *C. festiva* Dewey. From all these it is quickly separated by the looser inflorescence in which the spikes though approximate are not crowded. It is also suggestive of the very local *C. oronensis* Fernald, but differs in its broad ovate winged perigynia about 2 mm. broad.— M. L. FERNALD, Gray Herbarium.

---

FESTUCA OCTOFLORA IN VERMONT.— This delicate grass was listed as *F. tenella* Willd. in Wm. Oakes's Catalogue of Vermont Plants, in Thompson's History of Vermont (1852). The station given was Bellows Falls, the collector, Carey. Messrs. Brainerd, Jones and



Eggleston in their *Flora of Vermont* (1900) were unable to verify this report, or to find other stations for this grass, so it was omitted from their list.

Last year, June 27, 1912, I collected this species, with other plants, at Red Rocks, near the shore of Lake Champlain, South Burlington. It grew in thin dry soil over red sandrock in light shade. The specimens are in my herbarium. This grass is so slender that it is easily overlooked, but it ought to occur in other similar places in the region. — CLARENCE H. KNOWLTON, Hingham, Massachusetts.

*Vol. 15, no. 177, including pages 153 to 172, was issued 1 September, 1913.*